

## REMARKS

This responds to the Official Action dated October 18, 2006. In order to advance prosecution, withdrawn claims 1-11 and 34-41 are canceled without prejudice or disclaimer. Applicants reserve the right to file these claims in a divisional application.

The undersigned attorney appreciates the careful review of the claims by the Examiner. Claims 15, 16, and 25 were all amended to correct informalities noted in the Office Action. Claim 13 was amended to delete an extra comma. As indicated, these are informalities and none of these amendments introduce new issues or new matter. Entry thereof is requested.

Claims 15-16 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Examiner contends that the specification does not support claim 15, lines 6-12, "a receiver portion.... and including a programmable frequency synthesizer and programmable modulator for allowing a transmission/reception frequency and modulation to be selectively modified by the personal computer." Attention is drawn to the page 13, lines 14-18, which teaches

Synthesizer 14 generates a specific radio frequency for a chosen channel of communication for example 1000 MHz, according to commands received from controller 26. The radio frequency is modulated using baseband signal levels from a digital-analog converter 16, so that the modulated signal output from the synthesizer is compatible with an industry-standard protocol.

The controller 26 provides commands to control the frequency synthesis and modulated output. Hence the frequency synthesizer and modulator are programmable as the controller provides the commands to these items. Moreover, the modulation scheme is "selectable" as described in the middle paragraph on page 3 also supporting the modulator is programmable. Withdrawal of this rejection is requested.

Claims 13-14, 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Carhart (6,622,304) in view of Fleming (US 6,073,188), and further in view of Bukhari (US 6,763,222).

Instant claim 13 requires a transceiver that resides in a box external to the computer and that transmits radio frequency signals responsive to data received from the personal computer via the USB type port and that receives radio frequency signals and converts the received signals to data for transfer to the personal computer via the USB type port, wherein the transceiver further

includes a network hub, the transceiver including a satellite antenna interface for coupling an external power supply to an external satellite antenna amplifier via a connection which transmits radio frequency signals.

As shown in Fig. 2, the satellite transceiver is isolated by the noise created by the high power/high voltage supply in the computer and the high voltage supply in the network hub.

Conventionally, two cards were utilized for transmit and reception from a satellite in a personal computer. This involved a complex arrangement where the transmit card was coupled to a receive card via the industry standard bus in the personal computer. This arrangement was deficient in that the transient noise from the power supply to other components in the PC hindered the operation of the sensitive satellite transceivers. That is, satellite signals are very weak and difficult to pick up and power supplies with their high voltage interfere with this reception. The instant claims solve this problem by providing an external power supply.

Bukhari simply discloses a VSAT terminal coupled to an indoor unit in a conventional manner. "During normal operations, the IDU 24 receives data from the user's equipment (not shown in Fig. 1) and modulates a reference signal in accordance with this data." This user's equipment is, of course, a PC or other similar device. The IDU 24 supplies the ODU with a DC voltage signal. However, there is no teaching or suggestion of an external power source as claimed. Instead, Fig. 1 of Bukhari seems to indicate that the power source is contained inside the IDU, and this suffers from the same deficiencies that the present invention was designed to overcome.

As recognized by the Office Action, Carhart does not teach or suggest a transceiver including a network hub as claimed in Claim 13 either alone or in combination much less the unique arrangement of the present invention including the external power supply. The power supply is co-located with the modulator. See Figure 10. Carhart shows at best a PC interface card coupled to a satellite. There is no disclosure whatsoever on how this may be done. Carhart is silent on whether this involves one card, two cards, or no cards such as with an external unit. In short, there is no disclosure whatsoever on how the system is configured when coupled to a satellite.

Fleming is directed to an electronic switching box (102) to enable two or more computer systems to share external peripheral devices as well as internal devices. See column 3, lines 33-

38. The switching box contains a USB hub (122) including USB ports. The USB hub enables one or more external peripheral devices to be coupled to the electronic switchbox such as a mouse, electronic pen, keyboard, monitor, printer or joystick. Fleming is not directed to communicating with a satellite or the use of a transceiver. There is nothing in Fleming that would suggest to one skilled in the art to use a network hub in Carhart to arrive at the instant claims much less the unique power supply arrangement of the present invention. Withdrawal of this rejection is requested.

Claims 15-16, 18, 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Carhart (6,622,304), in view of Dinwiddie et al. (US 6,481,013), and further in view of Seta (US 5,301,194).

Claim 15 includes a transmitter portion that resides in a box external to the computer and that transmits radio frequency signals responsive to data received from the personal computer via the USB type port; and a receiver portion that resides in the external box and that receives radio frequency signals and converts the received signals to data for transfer to the personal computer via the USB type port, further including an auxiliary bus directly connecting the transmitter portion and the receiver portion, wherein a synchronizing signal is conveyed from the receiver portion to the transmitter portion via the auxiliary bus and including a programmable frequency synthesizer and programmable modulator for allowing a transmission/reception frequency and modulation to be selectively modified by the personal computer.

In the instant claims, separate transmitter and receiver portions are claimed in the external box. The transmitter portion has large power requirements to upload information to the satellite. The receiver portion, however, needs to receive very low, weak signals. These signals are often faint and hard to receive, and the noise from the transmitter portion transmitting to the satellite can interfere with the reception of the signals from the satellite. By providing separate transmitter and receiver portions in the external box, the reliability of receiving a signal by the receiver portion is improved.

As recognized by the Office Action, Carhart does not teach or suggest a transmitter portion and a receiver portion that are connected as claimed. Carhart further does not teach that the receiving portion includes a programmable frequency synthesizer and programmable

modulator for allowing a transmission/reception frequency and modulation to be selectively modified by the personal computer and a synchronizing signal is conveyed from the receiver portion to the transmitter portion. As noted above, Carhart shows at best a PC interface card coupled to a satellite. Carhart is silent on whether this involves one card, two cards, or no cards such as an external unit. In short, there is no disclosure whatsoever on how the system is configured when coupled to a satellite. Thus Carhart clearly does not appreciate separate transmitter and receiver portions in an external box, nor does Carheat recognize that the reliability of receiving the signal from the satellite is improved by the claimed arrangement.

Dinwiddie likewise does not teach or suggest separate transmitter and receiver portions in an external box, nor does Dinwiddie recognize that the reliability of receiving the signal from the satellite is improved by the claimed arrangement. Dinwiddie does not remedy the defects of Carhart.

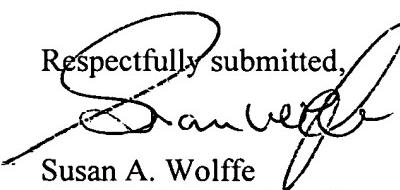
Seta shows a local office at one location and a central office at another location with the use of a synchronization signal. Seta does not even relate in any way to a transceiver portion, much less how to structure the connections between a transmitter portion and a receiver portion. Seta does not remedy the defects of Carhart. Withdrawal of this rejection is requested.

#### CONCLUSION

In view of the above amendments to correct informalities, cancellation of the withdrawn claims, and remarks, issuance of a Notice of Allowance is respectfully requested.

If any additional fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

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Respectfully submitted,  
  
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